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Regulating Alcohol Advertising: Content Analysis of the Adequacy of Federal and Self-Regulation of Magazine Advertisements, 2008–2010

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Abstract

Objectives—We analyzed beer, spirits, and alcopop magazine advertisements to determine adherence to federal and voluntary advertising standards. We assessed the efficacy of these standards in curtailing potentially damaging content and protecting public health.

Methods—We obtained data from a content analysis of a census of 1795 unique advertising creatives for beer, spirits, and alcopops placed in nationally available magazines between 2008 and 2010. We coded creatives for manifest content and adherence to federal regulations and industry codes.

Results—Advertisements largely adhered to existing regulations and codes. We assessed only 23 ads as noncompliant with federal regulations and 38 with industry codes. Content consistent with the codes was, however, often culturally positive in terms of aspirational depictions. In addition, creatives included degrading and sexualized images, promoted risky behavior, and made health claims associated with low-calorie content.

Conclusions—Existing codes and regulations are largely followed regarding content but do not adequately protect against content that promotes unhealthy and irresponsible consumption and degrades potentially vulnerable populations in its depictions. Our findings suggest further limitations and enhanced federal oversight may be necessary to protect public health.

Alcohol is heavily marketed in the United States; alcohol companies spend at least \$4 billion a year on marketing and promotion.^{1,2} Alcohol is the drug young people are most likely to

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Contributors

K. C. Smith led the study, including the development of the coding structure, analysis of the coded data, and article writing. S. Cukier led the coding of the advertising data and contributed substantively to the study design and analytic approach. D. H. Jernigan provided public policy expertise, obtained access to the data, contributed substantively to study design and analysis, and obtained funding support. All authors contributed substantively to the conceptualization of the study, analysis of the data, and writing of the results and analysis.

The contents of this article are solely the responsibility of the authors and do not necessarily represent the official views of Centers for Disease Control and Prevention.

Human Participant Protection

This work did not involve any human participants and therefore institutional review board approval was not necessary.

have used in the past 30 days³ and is responsible for approximately 4700 deaths per year among persons younger than 21 years.⁴ Young people are developmentally susceptible to the content of advertising^{5,6} and alcohol advertising specifically,^{5,7} and growing evidence indicates that alcohol advertising influences youth alcohol consumption, including encouraging earlier and heavier consumption.^{8,9} For those who have not yet initiated use, advertising is 1 way that positive expectations about the product and its potential benefits are developed^{10,11}; in minority communities, alcohol ads have been found to portray alcohol consumption as routine and normative, an entry point into “the good life,” and a marker of individual success.^{12,13} As of 2008, youths aged 12 to 20 years were exposed to 10% more national magazine advertising for beer than were adults aged 21 years and older and to 16% more advertising for alco-pops (also known as “flavored malt beverages” or “ready-to-drink flavored alcoholic beverages,” these are sweet beverages such as Smirnoff Ice or Mike’s Hard Lemonade that are served in a ready to drink, single-serving bottle or can).¹⁴ Youths’ exposure to distilled spirits advertising was approximately equal to that of adults. African American youths were exposed to 32% more alcohol advertising in magazines than were youths in general, although they had slightly less exposure than did African American adults.¹⁴

Considering the resources expended, levels of youths’ exposure, and advertising’s demonstrated power to shape potentially damaging behaviors, it is important that the public health community be consistently knowledgeable about alcohol advertising content. Alcohol advertising appears in multiple media and forms. For example, between 2008 and 2010, alcohol companies developed 1795 unique advertising images (“creatives”) and placed them 7634 times in national magazines in the United States at a cost estimated by Nielsen of \$847 712 100 (Nielsen Monitor-Plus, 2008-2010, The Nielsen Company, New York, NY). The growth of digital media offers greater access to younger audiences, the opportunity for marketing to be interactive, and a relative lack of regulation.¹⁵ Public health is best served when the context for advertising prioritizes health protection alongside a recognition of the principles of commercial free speech.

Federal Regulations

Despite growing evidence of the damaging impact of alcohol marketing and advertising on youths, federal regulation is minimal. The Treasury Department’s Alcohol and Tobacco Tax and Trade Bureau is the federal agency charged with collecting taxes and ensuring compliance with labeling and marketing regulations pertaining to all spirits, wine, and malt beverages (including beer) sold in the United States. According to Alcohol and Tobacco Tax and Trade Bureau regulations, marketing is prohibited from making false claims intended to deceive and cannot include statements and representations judged obscene or indecent.

Health claims and curative statements are also prohibited. Spirits marketing may not include claims of product purity, and beer ads cannot make any representation of product strength (Table 1).

Alcohol Industry Self-Regulation

In addition to federal regulations, advertising and marketing content is governed by a system of self-regulation under the purview of the Beer Institute and the Distilled Spirits Council of the United States, both of whose codes emphasize responsible practices on the part of alcohol producers as well as the acceptability of promoting legal products for adult consumption. Table 2 includes sections of the Distilled Spirits Council's Code of Responsible Practices for Beverage Alcohol Marketing and Advertising and the Beer Institute Advertising and Marketing Code.

There is a long history of industrial self-regulation pledges in the face of actual or potential external threat of restrictions.¹⁶ Self-regulation is sometimes employed in an attempt to delay or prevent stronger external regulation. Industry self-regulation of alcohol has been described as “a classic example of an industry using voluntary codes in conjunction with federal oversight to deflect government regulation.”^{16(p244)} Self-regulation of marketing practices may be less onerous than is government regulation, but research has suggested that the efficacy of self-regulation in controlling content is questionable.¹⁷ There are currently no authoritative measures of conformity to industry-imposed codes.¹⁸

A decade ago, an independent assessment of the consistency of industry-sponsored advertising standards board decisions derived from industry advertising codes concluded that self-regulation is incompatible with ethical expectations to protect the public from damaging marketing practices.¹⁷ The potential for self-regulation to fail to control content was also illustrated by Barbeau et al.'s¹⁹ analysis of tobacco industry adherence to voluntary advertising codes, which found ads to be culturally positive in terms of people and behaviors depicted despite adherence to the letter of the codes.

In light of questions about the efficacy of self-regulation and the alcohol industry's ability to self-regulate, we undertook a systematic examination of alcohol magazine advertising's adherence to current federal regulations and industry self-regulatory standards.

METHODS

We conducted a systematic content analysis of all advertising creatives pertaining to beer, spirits, and alcopop products placed in US national newsstand magazines between 2008 and 2010. We excluded wine advertising because it is an artisanal product that is neither commodified nor advertised in the same manner as beer and spirits and because wine is consumed by youths in much smaller volumes than are other alcoholic products.³ Ad creative data came from Nielsen through the Monitor-Plus service in the form of individual jpeg files. We archived and analyzed 1795 unique and distinct ad creatives—a census of national magazine advertising content for nonwine alcohol products during this period. We did not have data on the magazines in which the ads appeared.

We constructed the coding framework to determine adherence to federal regulations and voluntary industry codes. Consistent with the approach taken by Babor et al.,¹⁸ components of the federal regulations and industry standards were central to analytic development, and codes adhered strictly to the wording and description provided in the regulations and

standards. The coding procedure explicitly focused only on manifest or common content, namely, meanings about which most people can agree.²⁰

We developed the analytic framework iteratively on the basis of a detailed review of the Alcohol and Tobacco Tax and Trade Bureau's federal regulations and the Distilled Spirits Council of the United States and Beer Institute codes as well as an initial consideration of 100 randomly selected ad creatives. We also used prior work on magazine advertising of food products²¹ and alcohol²² as well as published literature on alcohol advertising²³ to draft an initial coding framework. In addition to coding for whether each ad contravened any federal regulation or industry standard, we coded for the existence, content, and prominence of a tagline and a responsibility message.

To code for health-related appeals of the product, we used our own initial screening question, "Does the ad contain any health-related statements?" defined as any general statement positioning an alcoholic beverage positively in relation to health, including statements related to low-calorie or low-carbohydrate content. We then screened this subset of ads against the Alcohol and Tobacco Tax and Trade Bureau's more specific regulations regarding health-related statements that exclude caloric depictions from health statements.

We developed the coding framework over 9 months through 15 iterations, using 10 ads to test coding developments at each stage. Two coders tested the coding framework's reliability by coding a final set of 10 ads before going live with 1 expert coder. At this point, the coders were consistent across all variables at or above 90%. We discussed and coded the few differences over 3 months during the fall of 2011. To ensure coding integrity, consistency, and reliability throughout the process, the single coder coded a set of 40 ads at the beginning and then recoded them at the end of the process. Percentage agreement at the 2 time points ranged from 90% to 100%, with the Cohen κ scores > 0.7 for variables for which there was sufficient variability to calculate. A single coder initially coded "apparent" age by judging whether the ad contained a young model (defined as appearing ≤ 25 years). Nine coders (men and women 21-40 years) then coded the subset of 33 ads that the initial coder assessed as including a young model regarding whether the model appeared to be younger than 21 years. We identified 8 ads in which 5 or more coders rated the model as appearing to be younger than 21 years; we assessed these to be noncompliant. Both our Cohen κ statistics and Babor et al.'s¹⁸ conclusion that naïve coders or raters can provide consistent assessments of the US Beer Code provide us with confidence in the rigor of the process and reliability of our findings.

RESULTS

The data set consisted of 1795 advertising creatives. Ads for spirits dominated the data set (76%; $n = 1371$). Beer ads accounted for 23% ($n = 411$), and less than 1% ($n = 13$) of creatives advertised alcopops (Table 3).

Breaches of Federal Regulations

Overall, ads were compliant with federal regulations; few ($n = 23$) explicitly contravened marketing practice rules. No ads made false claims, although 5 vodka ads used the word

“pure” in violation of the federal regulations (referencing pure spirit and pure luxury and suggestions to reveal the purity, discover the purity, and embrace the purity).

We coded 9 ads as violating federal regulations against obscene or indecent images, for example, a woman reapplying lipstick after an implied act of oral sex. Three ads for 1 beer brand violated the federal ban on health-related statements by presenting the product as a smart or good choice alongside models engaged in physical activities (Table 1).

Noncompliance With Industry Standards

As with federal regulations, the vast majority of ads were compliant with industry codes of practice. There were, however, some notable exceptions when creatives depicted people.

We assessed a set of 38 unique ads as noncompliant with industry standards: we coded 7 ads as including an implied illegal activity, for example, drinking underage or surfing on an airport luggage belt. We coded a further 3 ads as portraying alcohol consumption by someone engaged in or immediately about to engage in any activity requiring a high degree of alertness or physical coordination, for example, a woman preparing for a boxing match holding a bottle of caffeinated vodka; 10 ads degraded a gender or a minority group, 4 appealed primarily to an underage audience, 4 showed excessive or irresponsible consumption, 3 associated drinking with a rite of passage or attainment of adulthood, and 3 used gratuitous nudity, overt sexual activity, or promiscuity.

As well, we deemed the 9 ads that we assessed to breach federal guidelines regarding obscenity to be noncompliant with the Distilled Spirits Council of the United States code prohibiting sexually lewd or indecent images, for example, cartoon depictions of sexual positions. Of the 545 ads depicting people, we coded 8 as including models who appeared to be younger than 21 years (Table 2). In total, 52 (3%) unique ads violated either the federal regulations or industry standards.

Problematic Content Within Adherent Creatives

Analysis of manifest content demonstrated that whereas alcohol ad creatives were largely compliant with regulations and standards, there were numerous instances of questionable content with regard to the industry's definition of responsible practices.¹

For an ad to violate federal or industry codes, explicit and unambiguous offensive text or images have to appear. However, much of the advertising is not clear-cut in its messaging; therefore, we judged most ads to not be in violation.

Approximately 30% (n = 545) of ads included people. The most frequent activity portrayed was some kind of sexual or sexualized scenario (n = 94), followed by depictions of either watching or participating in sports (n = 81), and then depictions of party or club scenes (n = 66). Activities portrayed and associated with alcoholic beverage consumption were potentially problematic in terms of protection of public health and responsible consumption (as defined by the industry standards) but were not in violation of the regulatory codes, as follows:

Aspirational qualities associating alcohol with life success—Current industry standards prohibit ads from portraying alcohol consumption as necessary for attainment of social, professional, or other forms of success. Although few ads explicitly crossed the line, ads routinely aligned such success with drinking. One beer ad suggested that the more beer you consume the more desirable or aspirational your identity will be (from a clown at 4.0 oz of beer consumed to a secret agent at 25.4 oz of beer). The majority of creatives (n = 1177; 66%) included a tagline such as Heineken's "Give yourself a good name," Absolut's "In an Absolut world," or Kahlua's "Explore your curiosity." These often provided straightforward associations between alcohol and personal positive identity or lifestyle in line with the finding by Barbeau et al.¹⁹ that tobacco advertising communicated culturally positive messages about tobacco use to youths.

Use of degrading images and sexual prowess and success to promote alcohol—A subset of creatives involved depictions of sexuality or included content degrading toward women or members of marginalized groups. Many ads included images of scantily clad, objectified, and sexualized women; yet these ads did not violate the specific guidelines regarding the depiction of sexuality. For example, an ad for Fat Ass Tequila showed a woman in a string bikini in full make-up and plumped lips at the edge of a pool at night. The side of her breast is visible as is most of her buttock. The caption reads, "Sexy, nice body, delicious and smooth . . . and the model isn't too shabby either." This ad sexualizes and objectifies women and associates sexuality with the product but is likely not in violation, because the codes nowhere specifically define obscene or gratuitous nudity.

Another example from Iceberg Vodka shows a young woman kneeling on a bed with a man behind her, his hand over hers, with only her bent legs and their hands visible. She is wearing a sheer, short skirt, and the tagline reads, "Discover the purity." The sexual connotations are clear in both image and tagline. Discovering the purity is suggestive of virginity, offering a tantalizing temptation to young men and providing positive reinforcement for sexual success.

Despite sections in the Distilled Spirits Council of the United States code on responsible content, good taste, and sexual prowess and success, none of the ads described above are clearly in violation of the industry standards as currently structured. Although the Iceberg Vodka ad is in violation of the federal regulations because it uses a derivative of the word "pure" when referring to something other than the truthful representation of "the ingredients used in the production of the distilled spirits,"² this regulation does not address the problematic sexual content.

Association of alcohol consumption with weight control or active lifestyle—Alcohol and Tobacco Tax and Trade Bureau regulations permit reference to caloric content. In reviewing the 41 ads highlighting caloric information, we identified 17 ads for Michelob ULTRA that tied the product's low-calorie content to depictions of active, sporty, and presumably health-focused individuals. Only 3 of these ads violated the federal regulations prohibiting health-related statements. Eleven of the 13 Miller Genuine Draft 64 ads highlighted the product's low calorie content with the tagline "As light as it gets." Other ads used low-calorie or no-fat content as the selling points for their products. These creatives

associate alcoholic beverages with active lifestyles and weight control although alcohol provides calories with little or no nutritional value.²⁴

DISCUSSION

Sharma et al.¹⁶ argued for the value of self-regulatory frameworks because such structures can protect the public and are also potentially flexible, efficient, congenial, and mindful of limited government resources. They also point out, however, that the protection afforded by such structures breaks down when industry concerns are prioritized over consumer protection, particularly if standards are weak or not adequately enforced. We have provided compelling data on the nature of alcohol advertising content when both federal regulation and industry standards are limited and ambiguous. Violations of the spirit of the regulations could be examined further, but to what end? The industry seeks to sell products and public health seeks to protect the public. Therefore, for a regulatory standard to have impact, it is the letter of the law that is critical; public health and industry can be expected to embrace different spirits. Currently, the letter of the law is not defined in any way that holds advertisers clearly accountable to anything other than the most obvious of transgressions. Moreover, battles over the spirit of the law are likely to be cumbersome and subject to claims of bias, whereas effective policy and regulation would make such interpretation unnecessary. Standards must be unambiguous and easily enforceable.

Whereas Sharma et al.¹⁶ argue in favor of the current system's efficiency for alcohol, our data illustrate that the self-regulatory bar set by the alcohol industry is ineffective in providing unambiguous and easily enforceable standards. The devil is in the details when it comes to regulation, and there are currently very few details as to what constitutes unacceptable practice regarding alcohol advertising. Existing industry voluntary codes permit ads to portray norms and present product attributes in ways that remain problematic even as ads comply with existing regulations and industry standards.

In particular, prohibiting images that could be perceived as lewd and degrading without clear rules about the standards by which images will be assessed creates ambiguity whereby ads objectifying and sexualizing women fall within bounds of acceptable practice. Moreover, committing to promote responsible consumption without defining "responsible" or considering the implications of associating alcohol with images of highly physical sporting activities leads to ambiguous and unenforceable standards. Finally, in the era in which obesity has been defined as a leading preventable cause of death, it is no longer defensible to separate out marketing on the basis of caloric content from health claims. On these grounds, our data suggest that Sharma et al.'s assessment of tobacco industry self-regulation also holds for that of the alcohol industry:

Self-regulatory tactics illustrate the central danger of self-regulation: an industry can use programs and approaches that appear credible and are framed in the public's interest but prevent legislation or regulation and damage public health.^{16(p245)}

Strengths and Limitations

We analyzed a census of unique ad creatives for beer, spirits, and alcopops ($n = 1795$) that according to Nielsen appeared in US national magazines between 2008 and 2010. Our analysis focused on manifest content and adherence to federal regulations and industry codes. A considerable strength of this analysis is that it pertains to the entire population of magazine advertising creatives over a 3-year period. We balanced this strength against the limitation that the creatives are not accompanied by any information on which magazines they appeared in or on the demographics of those magazines. Other research has found problematic content from alcohol advertising in magazines to be more concentrated in magazines with higher youth readerships²²; however, this research was derived from a sample of advertisements appearing in a small number of magazines known to have high youth readerships. Our study improves on earlier work by analyzing the content of all advertising in this medium for these types of alcohol during this period, but it does not link creative content to readership or exposure data.

Although magazine advertising does not dominate marketing the way that it once did, considerable resources continue to be spent on this medium; alcohol companies spent approximately \$848 million on magazine advertising between 2008 and 2010. Creative themes and images are commonly used across media (particularly print and digital and social media). Although it is possible that appeals and depictions employed in magazine advertising differ from those in other formats, we are not aware of any evidence to suggest that findings from magazine ad creatives would not hold at some level to advertising appearing in other visually static media.

We designed a coding framework to facilitate intercoder reliability, reduce subjectivity, and reflect the lack of information available as to ad placement (and therefore the target audience). In so doing, however, we limited our coding to traditional objective content analysis with a focus on manifest content and thus potentially missed latent meanings that would be commonly received by the target audience and could therefore provide insight into likely impact of the ads.²⁰ The ambiguity of the regulatory framework and industry guidelines create a possibility that other coders may have interpreted adherence differently than we have.

Conclusions

The existence of culturally positive as well as potentially degrading content in the magazine creatives is evidence of the current guidelines' weaknesses. Regulations regarding alcohol advertising content (both legal and industry standards) are ambiguous and ill defined, rendering compliance largely a nonissue. In fact, the Beer Institute's code review board has never found an alcohol advertisement to be in violation of its code.²⁵

Considering that beverage alcohol advertising has been shown to influence drinking behaviors, especially among youths,^{8,9} and considering the potential damaging effects of those behaviors,²⁶ it is critical to limit the negative health impacts of alcohol marketing and advertising. The models and depictions of normalized drinking behavior are of particular interest in relation to youth audiences. The pronounced potential for harm associated with

limited federal and ambiguous industry oversight provides support for consideration of policies to restrict the inclusion of people or anthropomorphic characters in ads because they inevitably provide positive associations with consumption.¹⁹

Guidance in this arena could come from the French Loi Evin, a measure passed in 1991 and determined by the European Court of Justice to be consistent with European Union free trade regulations. This law limits alcohol advertising to messages and images referring only to product qualities such as degree, origin, composition, and means of production. Although some have discussed the potential barriers to such advertising restrictions in the United States,²⁷ for example, protection of commercial free speech, these restrictions could safeguard young people against damaging advertising practices. Because little evidence exists in the alcohol field for this type of regulation, experience and evaluations on the effects of advertising restrictions in the tobacco field may be informative for ongoing policy discussions about alcohol advertising.²⁸

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References

1. Federal Trade Commission. Self-Regulation in the Alcohol Industry: Report of the Federal Trade Commission. Washington, DC: 2008.
2. Jernigan DH. Global alcohol producer, science, and policy: the case of the International Center for Alcohol Policies. *Am J Public Health*. 2012; 102(1):80–89. [PubMed: 22095330]
3. Johnston, LD.; O'Malley, PM.; Bachman, JG.; Schulenberg, JE. Monitoring the Future National Survey Results on Drug Use, Overview of Key Findings, 2011. National Institute on Drug Abuse; Bethesda, MD: 2011.
4. Centers for Disease Control and Prevention. [March 6, 2012] Alcohol-related disease impact software. 2012. Available at: http://apps.nccd.cdc.gov/DACH_ARDI/Default/Default.aspx.
5. Pechmann C, Levine L, Loughlin S, Leslie F. Impulsive and self-conscious: adolescents' vulnerability to advertising and promotion. *J Public Policy Mark*. 2005; 24(2):202–221.
6. Moses LJ, Baldwin DA. What can the study of cognitive development reveal about children's ability to appreciate and cope with advertising? *J. Public Policy Mark* Fal. 2005; 24(2):186–201.
7. Chen M-J, Grube JW, Bersamin M, Waiters E, Keefe DB. Alcohol advertising: what makes it attractive to youth? *J Health Commun*. 2005; 10(6):553–565. [PubMed: 16203633]
8. Anderson P, De Bruijn A, Angus K, Gordon R, Hastings G. Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol Alcohol*. 2009; 44(3):229–243. [PubMed: 19144976]
9. Smith LA, Foxcroft DR. The effect of alcohol advertising, marketing and portrayal on drinking behaviour in young people: systematic review of prospective cohort studies. *BMC Public Health*. 2009; 9(51):1–11. [PubMed: 19121216]
10. Austin EW, Knaus C. Predicting the potential for risky behavior among those “too young” to drink as a result of appealing advertising. *J Health Commun*. 2000; 5(1):13–27. [PubMed: 10848029]
11. Austin EW, Chen M-J, Grube JW. How does alcohol advertising influence underage drinking? The role of desirability, identification and skepticism. *J Adolesc Health*. 2006; 38(4):376–384. [PubMed: 16549298]
12. Alaniz ML, Wilkes C. Pro-drinking messages and message environments for young adults: the case of alcohol industry advertising in African American, Latino, and Native American communities. *J Public Health Policy*. 1998; 19(4):447–472. [PubMed: 9922620]

13. Kwate NOA, Meyer IH. Association between residential exposure to outdoor alcohol advertising and problem drinking among African American women in New York City. *Am J Public Health*. 2009; 99(2):228–230. [PubMed: 19059857]
14. Center on Alcohol Marketing and Youth. Youth Exposure to Alcohol Advertising in National Magazines, 2001–2008. Baltimore, MD: 2010.
15. Hastings G, Brooks O, Stead M, Angus K, Anker T, Farrell T. Alcohol advertising: the last chance saloon. *BMJ*. 2010; 340(23):184–186.
16. Sharma LL, Teret SP, Brownell KB. The food industry and self-regulation: standards to promote success and to avoid public health failures. *Am J Public Health*. 2010; 100(2):240–246. [PubMed: 20019306]
17. Jones SC, Donovan RJ. Self-regulation of alcohol advertising: is it working for Australia? *Journal of Public Affairs*. 2002; 2(3):153–165.
18. Babor TF, Xuan Z, Proctor D. Reliability of a rating procedure to monitor industry self-regulation codes governing alcohol advertising content. *J Stud Alcohol Drugs*. 2008; 69(2):235–242. [PubMed: 18299764]
19. Barbeau EM, DeJong W, Brugge DM, Rand WM. Does cigarette print advertising adhere to the Tobacco Institute's voluntary advertising and promotion code? An assessment. *J Public Health Policy*. 1998; 19(4):473–488. [PubMed: 9922621]
20. Austin, EW. Receiver-oriented message analysis: lessons from alcohol advertising.. In: Jordan, AB.; Kunkel, D.; Manganello, J.; Fishbein, M., editors. *Media Messages and Public Health: A Decisions Approach to Content Analysis*. Routledge; New York, NY: 2009. p. 192-210.
21. Manganello, J.; Smith, K.; Sudakow, K. A content analysis of food advertisements appearing in parenting magazines.. Paper presented at: American Public Health Association Annual Meeting and Exposition; Washington, DC. October 29–November 2, 2011;
22. Rhoades E, Jernigan DH. Risky messages in alcohol advertising, 2003–2007: results from content analysis. *J Adolesc Health*. 2013; 52(1):116–121. [PubMed: 23260844]
23. Austin EW, Pinkleton BE, Hust SJT, Miller AC-M. The locus of message meaning: differences between trained message recipients in the analysis of alcoholic beverage advertising. *Commun Methods Meas*. 2007; 1(2):91–111.
24. US Department of Agriculture. [September 29, 2012] Report of the Dietary Guidelines Advisory Committee on the dietary guidelines for Americans. 2010. Available at: <http://www.cnpp.usda.gov/dgas2010-dgacreport.htm>.
25. Beer Institute. [May 14, 2013] Responsibility and programs. Available at: <http://www.beerinstitute.org/bi/responsibility-programs/advertising-marketing-code>.
26. Masten AS, Faden VB, Zucker RA, Spear LP. Underage drinking: a developmental framework. *Pediatrics*. 2008; 121(suppl 4):S235–S251. [PubMed: 18381492]
27. Bayer R, Kelly M. Tobacco control and free speech—an American dilemma. *N Engl J Med*. 2010; 362(4):281–283. [PubMed: 20071696]
28. Ribisl KM. Research gaps related to tobacco product marketing and sales in the Family Smoking Prevention and Tobacco Control Act. *Nicotine Tob Res*. 2012; 14(1):43–53. [PubMed: 21690316]

TABLE 1

Health-Related Federal Regulations for Advertising Malt Beverages and Distilled Spirits and Violation Examples: United States, 2008-2010

Select TTB Regulations	Malt Beverages	Spirits	Violation, No. (%)	Examples of Violations
Any statement that is false or untrue in any material particular or that—irrespective of falsity; directly by ambiguity, omission, or inference; or by the addition of irrelevant, scientific, or technical matter—tends to create a misleading impression.	L	L	0 (0)	NA
Any statement, design, device, or representation that is obscene or indecent.	L	L	9 (<1)	<p>Cartoon depictions of couples and others in various active sexual positions while drinking from 750-ml alcohol bottles. 3am Vodka.</p> <p>Cartoon depictions of Polaroid pictures of naked women in sexual positions. 3am Vodka.</p> <p>Bellboy with a sly grin holding a tray of Effen Vodka. Caption: “Everyone enjoys Effen in the penthouse.” Effen Vodka.</p> <p>A woman reapplying lipstick after an implied act of oral sex on a man. Belvedere Vodka.</p> <p>“Effen is a five-letter word.” Effen Vodka.</p> <p>“Great Effen taste.” Effen Vodka.</p> <p>“Share Effen cheer.” Effen Vodka.</p> <p>“Taste. Seduce your senses. Effen is a five-letter word.” Effen Vodka.</p> <p>“Tempt. Fruit. Savor.” Effen is a five-letter word. Effen Vodka.</p>
Any statement, design, device, or representation of or relating to analyses, standards or tests, irrespective of falsity that the appropriate TTB officer finds to be likely to mislead the consumer.	L	L	0 (0)	NA
Any statement that malt beverages, distilled spirits, or wine are brewed, packed, labeled, distilled, blended, made, bottled, or sold under or in accordance with any municipal, state, federal, or foreign authorization, law, or regulation, unless such statement appears in the manner authorized by §5.42. ^a	L	L	3 (<1)	<p>“Puerto Rico is the only rum-producing region in the world to impose a government-regulated standard of quality that includes strict minimum age requirements. By law, all Puerto Rican rums are triple-distilled.” Rums of Puerto Rico.</p> <p>“All rums of Puerto Rico are aged by law for true excellence.” Rums of Puerto Rico.</p> <p>“According to German purity law, you only get four ingredients to brew beer... but the right ingredients... gets you ... Beck's.” Beck's Beer.</p>
In general, advertisements may not contain any health-related statement that is untrue in any particular or tends to create a misleading impression as to the effects on health of alcohol consumption.	L	L	3 (<1)	<p>(Image of slim bicycle racer and a schedule of physical activities for the day) “Because ULTRA active is a way of life. It's not just a refreshing choice, it's a smart one too. Only ULTRA has 2.6 grams of carbs, 95 calories, and all the taste you've earned.” Michelob ULTRA.</p> <p>(Image of female golf professionals) “I want to make smart choices, and Michelob ULTRA, with only 95 calories and just over two carbs, is the perfect choice for me.” Michelob ULTRA.</p> <p>(Image of golf professional) Good choices go a long way. That's why Natalie Gulbis chooses Michelob ULTRA. With 95 calories and 2.6 g of carbs, it's the only way to ... live life to the ULTRA.” Michelob ULTRA.</p>

Select TTB Regulations	Malt Beverages	Spirits	Violation, No. (%)	Examples of Violations
A specific health claim will not be considered misleading if it is truthful and adequately substantiated by scientific or medical evidence.	L	L	0 (0)	NA
A statement that directs consumers to a third party or other source for information regarding the effects on health of distilled spirits or alcohol consumption is presumed misleading unless it directs consumers in a neutral or other nonmisleading manner to a third party or other source for balanced information regarding the effects on health of malt beverage or alcohol consumption and includes as part of the health-related directional statement the following disclaimer: "This statement should not encourage you to drink or to increase your alcohol consumption for health reasons" or includes as part of the health-related directional statement some other qualifying statement that the appropriate TTB officer finds is sufficient to dispel any misleading impression conveyed by the health-related directional statement.	L	L	0 (0)	NA
Taste test results may be used in advertisements comparing competitors' products unless they are disparaging, deceptive, or likely to mislead the consumer.	L	L	0 (0)	NA
Any statement, design, device, or representation that tends to create a false or misleading impression that the malt beverage contains distilled spirits or is a distilled spirits product.	L	XXX	3 (<1)	Mojitos are typically made with rum, and Bacardi is a producer of rum. Bacardi Silver Mojito. "... ready-to-drink cocktail..." Bacardi Silver Sangria. (x2)
The words "strong," "full strength," "extra strength," "high test," "high proof," or "full alcohol strength," or any other statement of alcoholic content, or any statement of the percentage and quantity of the original extract unless required by state law.	L	XXX	0 (0)	NA
The word "pure" unless (1) it refers to a particular ingredient used in the production of the distilled spirits and is a truthful representation about the ingredient; (2) it is part of the bona fide name of a permittee or retailer from whom the distilled spirits are bottled; or (3) it is part of the bona fide name of the permittee.	XXX	L	5 (<1)	"Pure Spirit." Crystal Head Vodka. Young woman kneeling on a bed with a man behind her, his hand over hers and only the hands and her legs are visible. She is wearing a sheer, short skirt and the tagline reads, "Discover the purity." Iceberg Vodka. A man and a woman are embracing with only their upper torsos visible. Neither is wearing a shirt and only the woman's bra is visible, being unhooked by the man, with the tagline "Reveal the purity." Iceberg Vodka. A woman's 2 hands are embracing a man's hand that is embracing a bottle of vodka, with the tagline "Embrace the purity." Iceberg Vodka. "Pure Russian Luxury." Imperia Vodka.

Note. TTB = Alcohol and Tobacco Tax and Trade Bureau; L = included in the regulations; NA = Not applicable; XXX = not included in the regulations. Malt beverages examined were beer and alcopops.

^a §5.42 is the list of prohibited practices for labeling and advertising distilled spirits.

TABLE 2

Health-Related Sections of the BI's and DISCUS'S Code of Responsible Practices for Beverage Alcohol Marketing and Advertising and Examples of Violations of the Codes: United States, 2008-2010

Select BI or DISCUS Voluntary Codes	Agency	Violations, No. (%)	Examples of Violations
Beverage alcohol advertising and marketing materials should not rely on sexual prowess or sexual success as a selling point for the brand. Accordingly, materials should not contain or depict:			
Graphic or gratuitous nudity	BI/DISCUS	1 (<1)	Cartoon depictions of Polaroid pictures of naked women in sexual positions. 3am Vodka.
Overt sexual activity	BI/DISCUS	2 (<1)	Cartoon depictions of couples and others in various active sexual positions while drinking from 750-ml alcohol bottles. 3am Vodka. Only torsos are visible: a man with no shirt is unhooking a topless woman's bra while they are in an embrace. "Reveal the purity." Iceberg Vodka.
Promiscuity	DISCUS	1 (<1)	Cartoon depictions of couples and others in various active sexual positions while drinking from 750-ml alcohol bottles. 3am Vodka.
Sexually lewd or indecent images or language (DISCUS) or lewd or indecent language or images (BI)	BI/DISCUS	9 (<1)	Cartoon depictions of couples and others in various active sexual positions while drinking from 750-ml alcohol bottles. 3am Vodka. Cartoon depictions of Polaroid pictures of naked women in sexual positions. 3am Vodka. Bellboy with a sly grin holding a tray of Effen Vodka. Caption: "Everyone enjoys Effen in the penthouse." Effen Vodka. A woman reapplying lipstick after an implied act of oral sex on a man. Belvedere Vodka. "Effen is a five-letter word." Effen Vodka. "Great Effen taste." Effen Vodka. "Share Effen cheer." Effen Vodka. "Taste. Seduce your senses. Effen is a five-letter word." Effen Vodka. "Tempt. Fruit. Savor." Effen is a five-letter word. Effen Vodka.
Beverage alcohol advertising and marketing materials should not degrade the image, form, or status of women, men, or of any ethnic, minority, sexually oriented, religious, or other group.	DISCUS	10 (<1)	Cocktail waitress wearing 1970s Playboy bunny costume including rabbit ears, a collar, and rabbit tail while working. Playboy Spirits. (3 versions) Man looking down on woman playing pool, as if at an object. "See how the night plays out. Always worth it." Bud Light. A woman reapplying lipstick after an implied act of oral sex on a man. Belvedere Vodka. "If you raise your pinky, we don't know you." Foster's Premium Ale. Women scantily dressed in French maid outfits as trophies for a cut-out man. Captain Morgan. Patron Tequila is a "PMS Patch, Anticuddling Device." Patron Tequila. Image of 3 pairs of women's naked legs up to upper thighs wearing high heels with the caption: "Meet Miss Russia. And her friends. In Russia." Russian Standard Vodka. Scan a 2-dimensional barcode with your phone and get an image of Playmate, Miss July. "Scan the Ad. Get the Girl." Hornitos Tequila.
Beverage alcohol advertising and marketing materials should not depict situations in which beverage alcohol is being consumed excessively or in an irresponsible manner.	BI/DISCUS	4 (<1)	If your flight Is delayed, have a Malibu cocktail and then jump on the luggage belt to surf on moving luggage; use the courtesy telephone to announce your "party," and jump on restaurant tables to dance. Malibu Rum. On laundry day, load your clothes onto a skateboard and ride down the street or "down the stairs" with laundry between your legs. Sip Malibu cocktails while sitting on the washing machine; "throw caution to the wind and use an empty washer" to create a foam party at the Laundromat "but make sure you keep those Malibu cocktails clear of the suds." Malibu Rum.

Select BI or DISCUS Voluntary Codes	Agency	Violations, No. (%)	Examples of Violations
			Cartoon depictions of couples and others in various active sexual positions, dancing, while drinking from 750-ml alcohol bottles. 3am Vodka. Circus act of 2 people standing on either end of a bicycle while balancing drinks and pouring alcohol between them. Fat Tire Ale.
Beverage alcohol products should not be advertised or marketed in any manner directed or primarily appealing to persons below the legal purchase age.	BI/DISCUS	4 (<1)	Sponsorship of historically African American universities and colleges. Coors Light. (x2) Highlighting a college fraternity house. Malibu Rum. Image of girl who looks <21 y, lying on the beach with her young boyfriend. Daily's Cocktails.
To help ensure that individuals in beverage alcohol advertising are and appear to be above the legal purchase age, models and actors employed should be a minimum of 25 y, substantiated by proper identification, and should reasonably appear to be aged 21 y and older.	BI/DISCUS	8 (<1)	Young girl as lingerie model. Budweiser Select. Image of girl who looks <21 y, lying on the beach with her young boyfriend. Daily's Cocktails. Young girls doing ballet. Grande Absente. Group of friends carrying beer down the beach. Bud Light Lime. Group of friends lying on the beach. Leblon. Two young women and a young man holding beer cans with ads for music festivals. Budweiser. (x2) Young girl with an orange in her mouth showing her "O-Face." Three-O Vodka.
Beverage alcohol advertising and marketing materials should not portray beverage alcohol being consumed by a person who is engaged in, or is immediately about to engage in, any activity that requires a high degree of alertness or physical coordination.	BI/DISCUS	3 (<1)	Woman in the corner of a boxing ring holding a 750-ml bottle of Wide Eye Schnapps, being coached by male boxer, as if about to fight. Wide Eye Schnapps. Circus act of 2 people standing on either end of a bicycle while balancing drinks and pouring alcohol between them. Fat Tire Ale. If your flight is delayed, have a Malibu cocktail and then jump on the luggage belt to surf on moving luggage; use the courtesy telephone to announce your "party" and jump on restaurant tables to dance. Malibu Rum.
Beverage alcohol advertising and marketing materials should contain no claims or representations that individuals can attain social, professional, educational, or athletic success or status as a result of beverage alcohol consumption.	BI/DISCUS	1 (<1)	4.0 oz beer = clown; 12.0 oz beer = aging rock star; 25.4 oz beer = secret agent. Foster's Beer.
Beverage alcohol advertising and marketing materials should not employ religion or religious themes.	BI/DISCUS	1 (<1)	"Mr. Jack Daniel was NO SAINT. But he did start something of a religion." Jack Daniel's Whiskey.
Beverage alcohol advertising and marketing materials should not imply illegal activity of any kind.	BI/DISCUS	7 (<1)	On laundry day, load your clothes onto a skateboard and ride down the street or "down the stairs" with laundry between your legs. Sip Malibu cocktails while sitting on the washing machine; "throw caution to the wind and use an empty washer" to create a foam party at the Laundromat "but make sure you keep those Malibu cocktails clear of the suds." Malibu Rum. If your flight is delayed, have a Malibu cocktail and then jump on the luggage belt to surf on moving luggage; use the courtesy telephone to announce your "party" and jump on restaurant tables to dance. Malibu Rum. Group of friends who appear underage, implying underage drinking, lying on the beach. Leblon. Young girl with an orange in her mouth showing her "O-Face" implying underage drinking. Three-O Vodka. "Live LeSinfully" implying committing sins. LeSin Vodka. Image of girl who looks < 21 y, lying on the beach with her young boyfriend, implying underage drinking. Daily's Cocktails. Image of a lit string of a bomb attached to a vodka bottle with the caption: "Make your party the bomb." Atomic Vodka.

Note. BI = Beer Institute; DISCUS = Distilled Spirits Council of the United States.

TABLE 3

Overview of the Nature of National Magazine Creatives for Malt-Based Beverages and Distilled Spirits: United States, 2008-2010

Variable	No. (%)
Total ad creatives	1795 (100.0)
Alcopops	13 (0.7)
Beer	411 (23.0)
Spirits	1371 (76.0)
Portrayal of product and people	
Product only	1217 (68.0)
Product and people	528 (29.0)
People only	17 (< 1.0)
No product or people	34 (2.0)
Tagline and responsibility messages	
Includes a tagline	177 (66.0)
Includes a tagline only	110 (6.0)
Includes a responsibility message	1555 (87.0)
Includes a responsibility message only	492 (27.0)
Includes both tagline and responsibility message	1064 (59.0)
Responsibility message is less visible than tagline	1015 (95.0)
Responsibility message promotes the product	1157 (75.0)
Age, y	
Clearly < 25	33 (6.0)
Appeared <21	8 (< 1.0)
Where the ads include people, what are they doing?	545 (100.0)
Inactive (looking at the camera, simply seated or standing with or without the product in hand)	156 (29.0)
Sex or sexual connotations	94 (17.0)
Sporting activities (playing or watching)	81 (15.0)
Party culture (e.g., depictions of dance clubs)	66 (14.0)
Socializing (hanging out, relaxing, celebrating, dining and romance)	50 (9.0)
Adventure	9 (2.0)
Other (e.g., singing, playing musical instruments, at the beach, carnival, camping, tattooing, walking, fantasy scene, bar tending)	104 (19.0)
Ads in violation of federal codes (TTB) or industry codes (DISCUS or BI)	
Violation of federal codes	23 (2.0)
Violation of industry codes	38 (2.0)
Unique ads in violation of either code	52 ^a (3.0)

Note. BI = Beer Institute; DISCUS = Distilled Spirits Council of the United States; TTB = Alcohol and Tobacco Tax and Trade Bureau. Malt beverages examined were beer and alcopops. Percentages may total more than 100% because people in the ads were coded as doing more than 1 activity in a few instances.

^aThere is an overlap between ads that violate federal codes and industry codes; therefore, the total does not reflect the sum of the number of violations from each category.